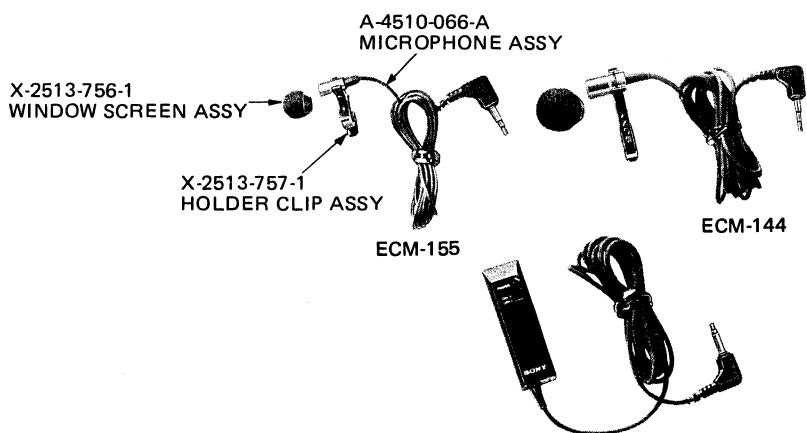


# ECM-144/155

## SERVICE MANUAL

1960  
US Model  
Canadian Model  
AEP Model  
UK Model  
E Model



Battery box is supplied with ECM-144 and ECM-155.

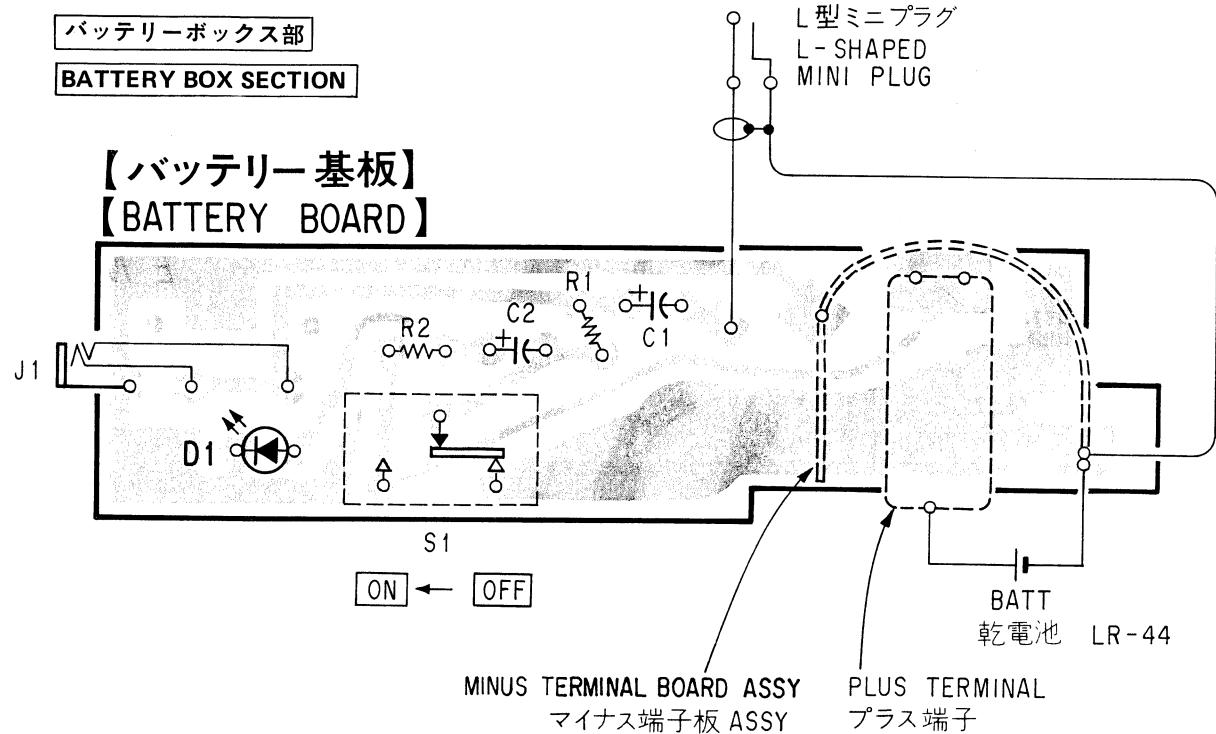
### SPECIFICATIONS

Type:	Electret condenser microphone
Battery:	Alkaline-manganese battery IEC Designation LR44
Dimensions:	Microphone $\phi 5.6 \times 17.7$ mm (ECM-155) $\phi 8.5 \times 17.5$ mm (ECM-144)
	Battery box 16 x 12.5 x 52.5 mm (w/h/d)
Weight:	Microphone Approx. 8 g (ECM-155) Approx. 15.5 g (ECM-144)
	Battery box Approx. 22 g (incl. battery)
Microphone cable:	Microphone 1.2 m Battery box 1.2 m
Frequency response:	50 – 15,000 Hz
Directivity:	Omni-directional
Output impedance:	2.7 k $\Omega$ ± 20%, unbalanced
Output level (deviation ±3 dB):	Open circuit voltage*¹ –65 dB (0.56 mV)*¹ 0 dB = 1 V/1 $\mu$ bar, 1,000 Hz Effective output level*² –55.3 dBm *² 0dBm = 1 mW/10 $\mu$ bar 1,000 Hz
Signal-to-noise ratio:	More than 38 dB (1,000 Hz, 1 $\mu$ bar)
Power requirements:	Normal operating voltage: 1.5 V Minimum operating voltage: 0.9 V Battery life: Approx. 400 hours with Sony alkaline-manganese battery A76
Maximum sound pressure input level:	More than 110dB SPL (at 1,000 Hz, 1% distortion)
Temperature range:	0°C to 60°C for operation

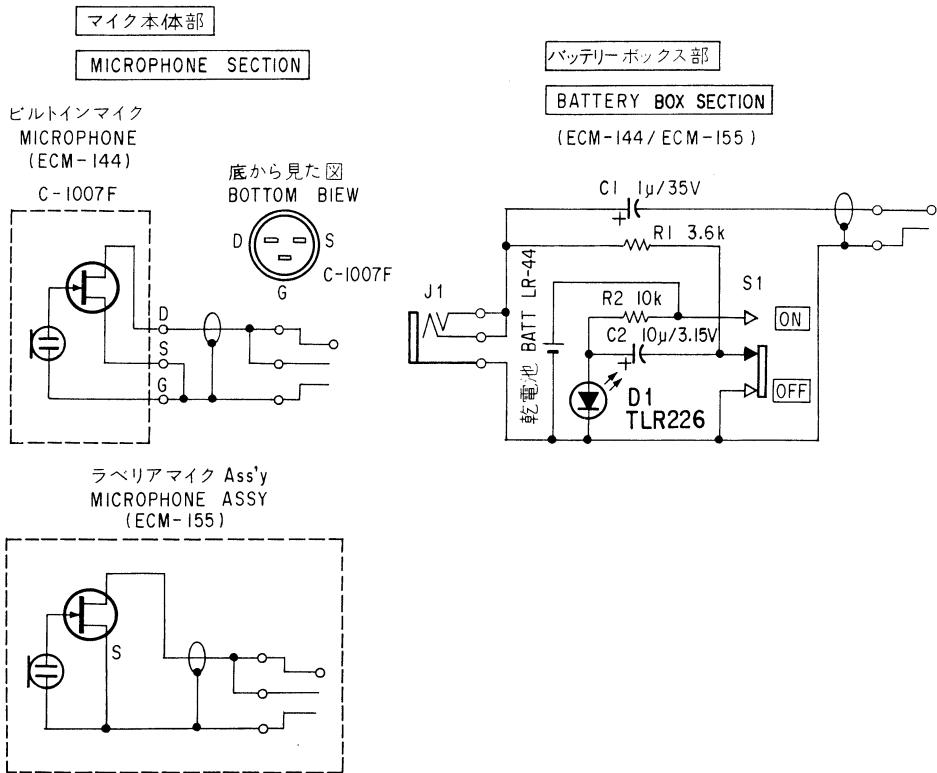
ELECTRET CONDENSER MICROPHONE  
**SONY**<sup>®</sup>



## 1. MOUNTING DIAGRAM

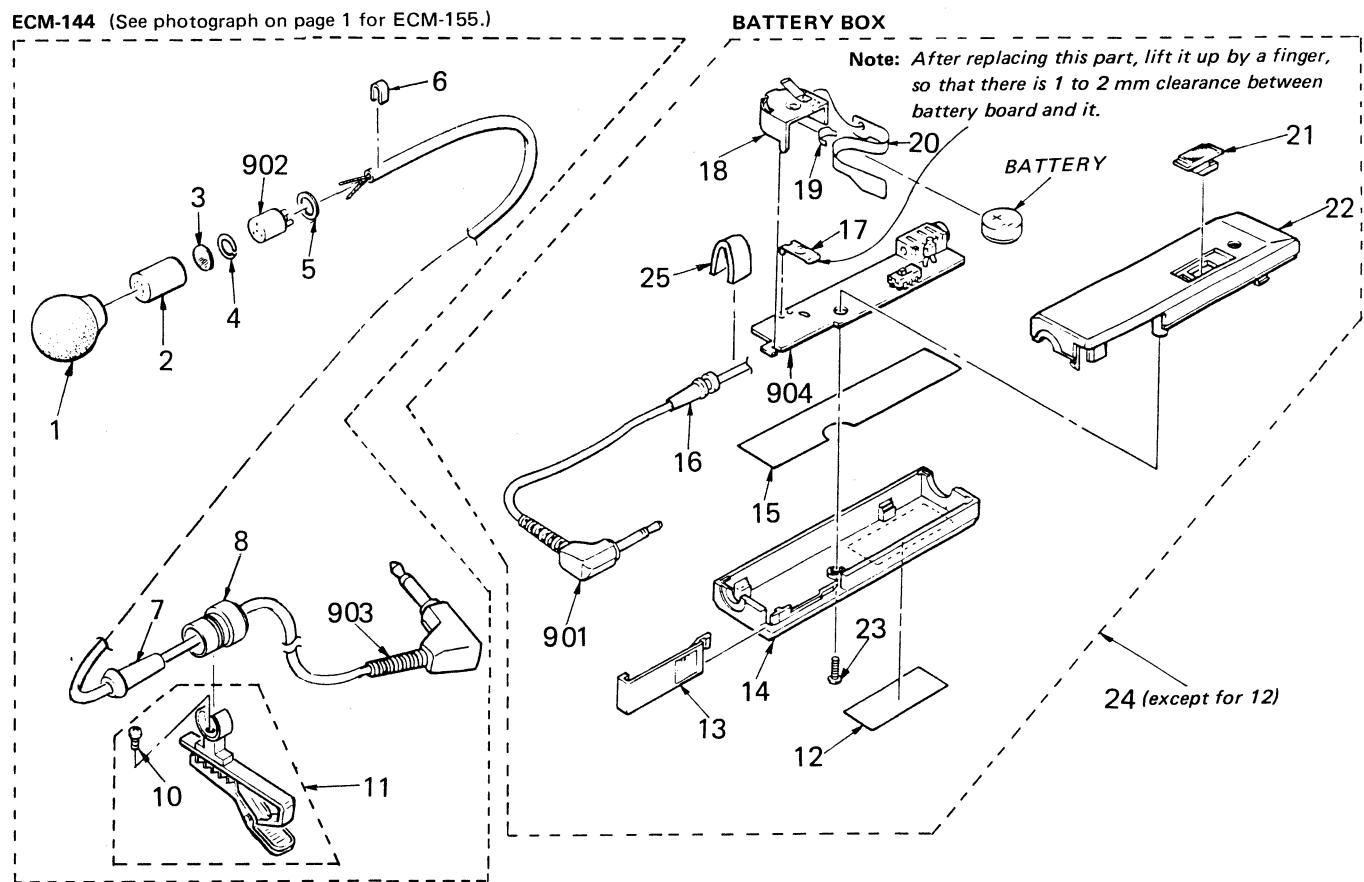


## 2. SCHEMATIC DIAGRAM



## 3. EXPLODED VIEW AND PARTS LIST

ECM-144 (See photograph on page 1 for ECM-155.)

ELECTRICAL PARTS

No.	Part No.	Description	Remarks	Ref.No.	Part No.	Description
1	X-2523-603-0	(ECM-144)...WIND SCREEN ASSY		901	1-558-696-11	CORD, MICROPHONE (2.2 DIA.)
2	2-536-801-11	(ECM-144)...CASE, MICROPHONE		902	8-814-223-00	(ECM-144)...MICROPHONE C-1007F
3	2-523-656-00	(ECM-144)...CLOTH, PROTECTION		903	1-558-695-11	(ECM-144)...CORD, MICROPHONE (2.2 DIA.)
4	*2-523-677-00	(ECM-144)...SPACER		904	*1-619-427-11	PC BOARD, BATTERY
5	2-536-803-01	(ECM-144)...STOPPER		C1	1-131-347-00	TANTALUM 1MF 20% 35V
6	2-523-606-00	(ECM-144)...CLAMP, CORD		C2	1-131-389-00	TANTALUM 10MF 20% 3.15V
7	2-522-050-11	(ECM-144)...BUSHING		D1	8-719-812-26	DIODE TLR226
8	2-536-802-11	(ECM-144)...CASE, BUSHING		J1	1-507-950-41	JACK (SMALL TYPE)
10	7-627-551-18	SCREW, PRECISION +P 1.4X2		R1	1-247-844-00	CARBON 3.6K 5% 1/6W
11	X-2523-621-1	(ECM-144)...CLIP ASSY, HOLDER		R2	1-249-429-11	CARBON 10K 5% 1/6W
12	2-523-682-01	(ECM-144)...LABEL, MODEL NUMBER		S1	1-553-977-00	SWITCH, SLIDE
	2-538-606-01	(ECM-155)...LABEL, MODEL NUMBER				
13	2-538-605-01	LID, BATTERY CASE				
14	2-538-614-01	CASE (LOWER)				
15	2-538-607-01	SHEET, INSULATING				
16	2-284-602-11	BUSHING				
17	2-533-604-00	TERMINAL, PLUS				
18	X-2513-755-1	(ECM-144)...TERMINAL BOARD ASSY, MINUS				
19	2-533-615-02	SHEET, INSULATING				
20	2-533-608-00	BELT				
21	2-538-612-01	KNOB, SWITCH				
22	2-538-613-01	CASE (UPPER)				
23	7-685-104-29	SCREW +P 2X6 TYPE2 SLIT				
24	A-4521-028-A	CASE ASSY				
25	2-523-606-00	CLAMP, CORD				

ACCESSORY & PACKING MATERIAL

2-599-281-11 MANUAL, INSTRUCTION

## NOTE:

Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.